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(54) **LIGANDS OF THE BENZO[*H*]QUINOLINE CLASS AND TRANSITION METAL COMPLEXES CONTAINING THEM AND USE OF SAID COMPLEXES AS CATALYSTS**

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(58) **Field of Classification Search**

None

See application file for complete search history.

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(57) **ABSTRACT**

A new class of ligands derived from benzo[h]quinoline are described and these ligands are used to prepare several novel transition metal complexes. The complexes are preferably of the group VIII transition metals iron, ruthenium or osmium, with the benzo[h]quinoline ligands acting as tridentate ligands. The complexes described are proved to be very active catalysts for the reduction of ketones and aldehydes to alcohols, via hydrogen transfer and hydrogenation reactions. These compounds hence can be usefully employed as catalysts in said reduction reactions.

7 Claims, No Drawings